Semi-semantic Models for Cross-Sector Portals





Project Presentation

Introduction, Overview and Implications

Your Name



Web 1-2-3 What does the world look like today?





Are we able to imagine where it goes?









Reis hit for turistene oppdager det

NYHETER STORBY TEMAER REISETIPS DISKUTER TEST&QUIZ











NYHETSBREV OM REISE 3

D Søk i REIS

Søk din flyreis

Lateran British of the grown

Lac V



Endelig skjønner nettet hva jeg mener!

Under reiselivsmessen ITB i Berlin denne uken var en stor del av programmet viet fremtidens re Her er noen smakebiter på den nye hverdagen:

Slik blir fremtidens ferie

Ta ferie på Twitter

For to år siden var Facebook den store snakkisen. Nå er det Twitter alle skal være med på, οι internasjonale reisebransjen. Ekspertene spår at bruk av Twitter blir en av de helt store reisetr Nettsamfunnet vil bli en viktig arena for kjøp og salg av reiser. Dessuten åpner Twitter for mye mellom forbrukere og reisearrangører.

Eller mellom reiseglade mennesker:

 - Jeg var i Berlin og ville vite hvor en attraksjon var. Jeg stilte et spørsmål og fikk fem-seks sva Darren Cronian, som driver reisebloggen travel-rants.com.



Få flytidene på mobilen

Nett som forstår

Semantisk web er den nye, fremvoksende teknologie meningen bak ordene du taster inn.

- Hvis du søker etter en skiferie i Europa den tredje ul så får du ikke tilbud om ferie der, eksemplifiserer Wo

Semantisk web skjønner hva du vil, og kan revolusjon fornuftig sortering av den enorme mengden reiseinforr

I dag er reisebestilling på nett ofte en kaotisk virksom leier bil på en tredje nettside. Nye tjenester samler tra alle bestillingene dine, og fungerer i tillegg som veivis

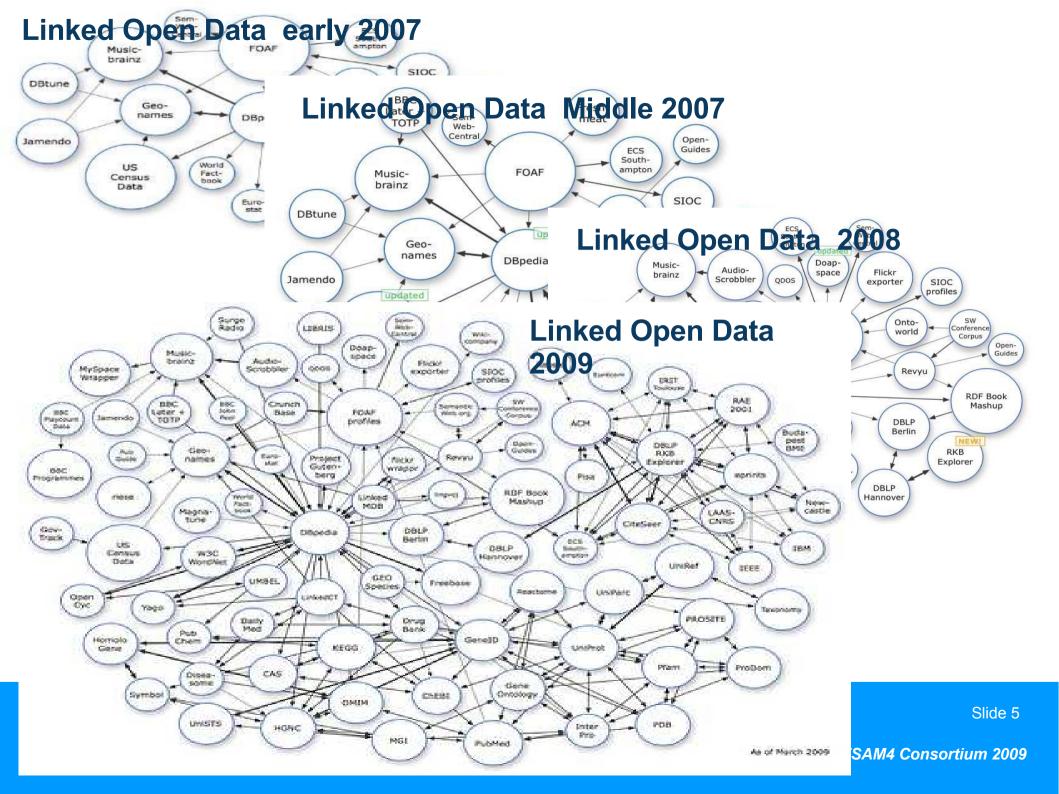
De beste reisenettstedene

Lytt til dine venner

Halvparten av verdens ti mest populære nettsteder er Tripadvisor en ledende aktør – et nettsted der tidligere

Men snart kan disse nettstedene blir mye mer avanse sosiale medier som Facebook og lignende.

- Et eksempel: Du vil lese en anmeldelse av et hotell



So how can we utilize these "community energies"?

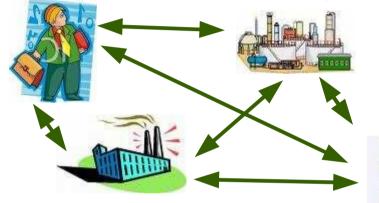


Supporting business models with (and for?) Semantic Technology



So what are the challenges? ...

 Genuine interaction & communication between content creators, owners and consumers.





- Globally Identifiable Information on Objects
- Globally Identifiable Statements about Objects and other statements
- Understanding ST's implications,
- Transforming your business and people,
- Adapting your business model!



..and what are the SESAM4 Objectives?

- To develop open standards and tools that will lower the barriers of entry in the area of semantically enhanced portals and services and make it possible for small and medium sized companies and organizations to exploit semantic systems.
- To develop methods, models and procedures for semi-automatic generation of ontologies from unstructured text indexes for use as background variables for semantic annotations.
- To improve, particularly in the area of scalability, current methods for text mining and indexing.
- To develop methods, models and procedures for integrating content management system based on RDF with content management systems based on Topic Maps and for semantic integration and coordination of large multi lingual content management systems
- To verify the functionality and scalability of these semi-automatically generated ontologies to integrate multiple large scale content management systems



Consortium Partners...





...SESAM4 is an Open Project

- Open Source
 - It will deliver Open Source software
- Best Practices
 - Based upon experiences from the community and projectowned reference implementations
- Community involvement
 - Where possible, the projects' results will be available for and discussed with relevant communities.



... SESAM4 is an integrated project



Topic Maps

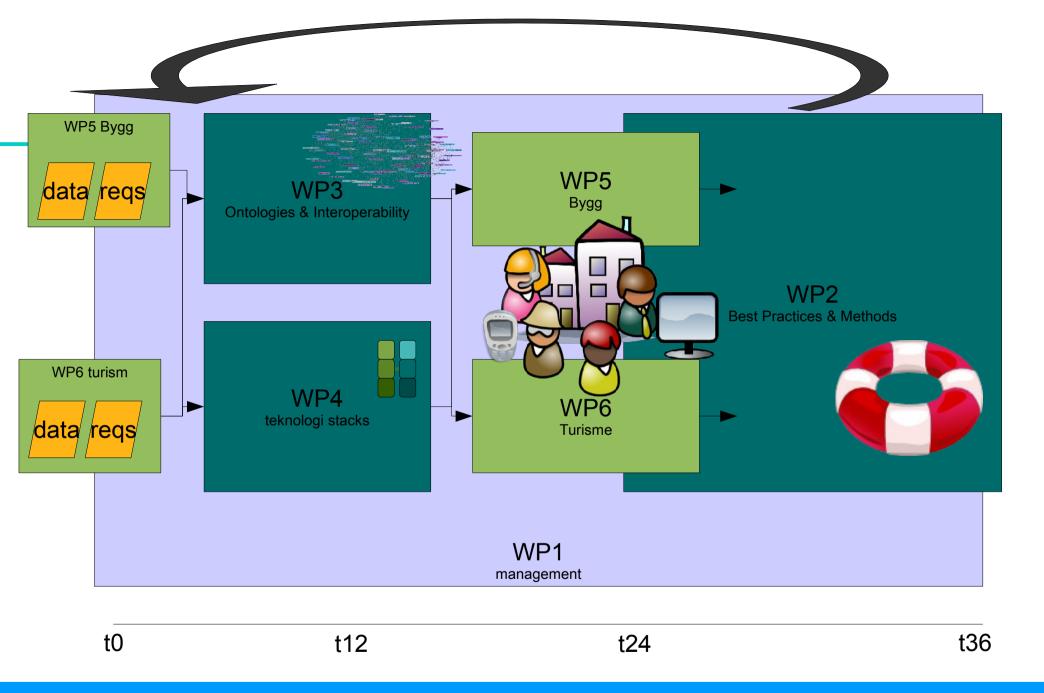




SESAM4's five pilars

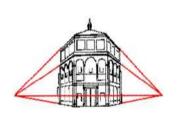


- 1. Use Case: Construction
- 2. Use Case: Tourism
- 3. WP R&D: ontology and semantic lifting
- 4. WP Technology: Semantic Web and ISO stacks
- 5. WP Best Practices: steps into the "semantic" future





Milestones



YEAR 1

artistic advance



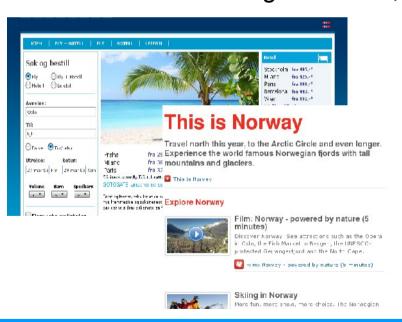
YEAR 2

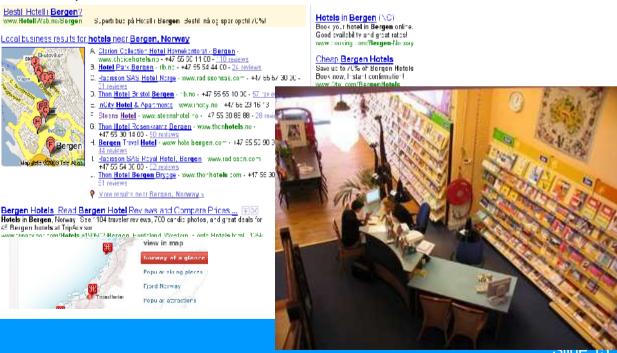


YEAR 3

Application domain: Tourism

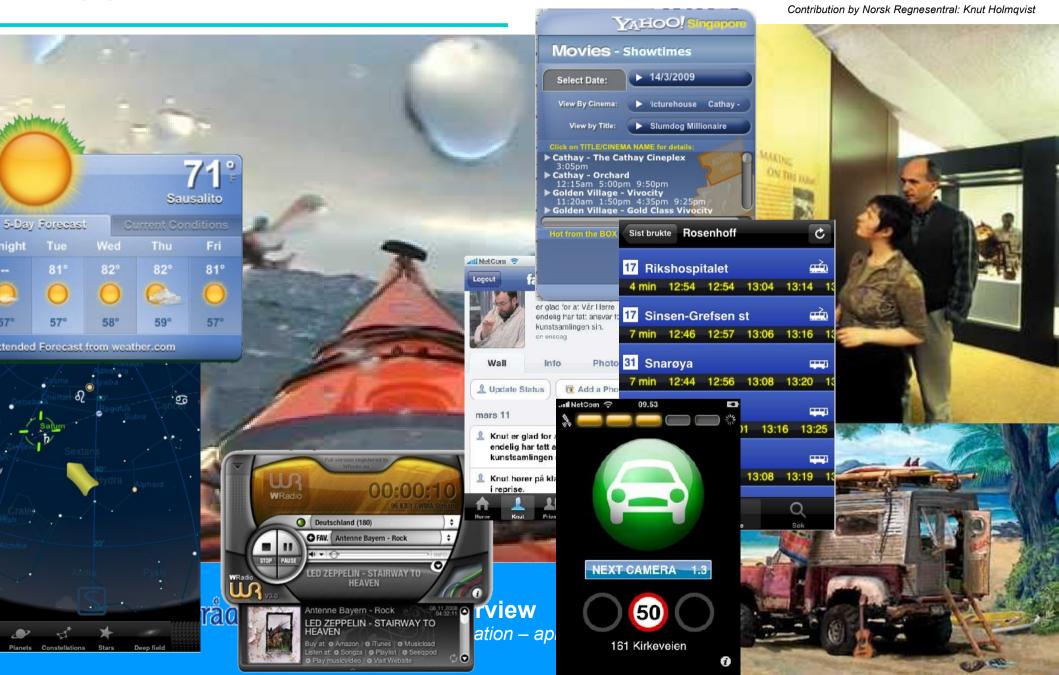
- Preparing and decision phases
 - Active, goal-directed information reach-out
 - Search for packages, hotels, flights, cars, events.
 - Planning of holidays
 - Booking of events, hotels, travels etc.







Application domain: Tourism



Application domain: Construction



Scenario 1:

an architect or engineer is working on a project in an early phase of the building project. The building site and address is known as well as the main functions for the building. She's is the process of establishing the initial BIM with functional requirements for rooms and main structural elements. She's working in her expert application that is a buildingSMART compatible CAD tool, and she has access to all of the SINTEF Building and Infrastructure Knowledge System (BKS).

Scenario 2:

 a contractor has received a BIM for pricing. He will choose products for the building based upon the specifications from the architect and engineer. He is also interested in other, derived, information about the products.

Scenario 3:

 the last user scenario we will be using an already built construction. The BIM now contains both function requirements and information about the actual products installed. In this scenario the user is the owner of the building looking to replace or improve products or parts of the building.



Application domain: Construction

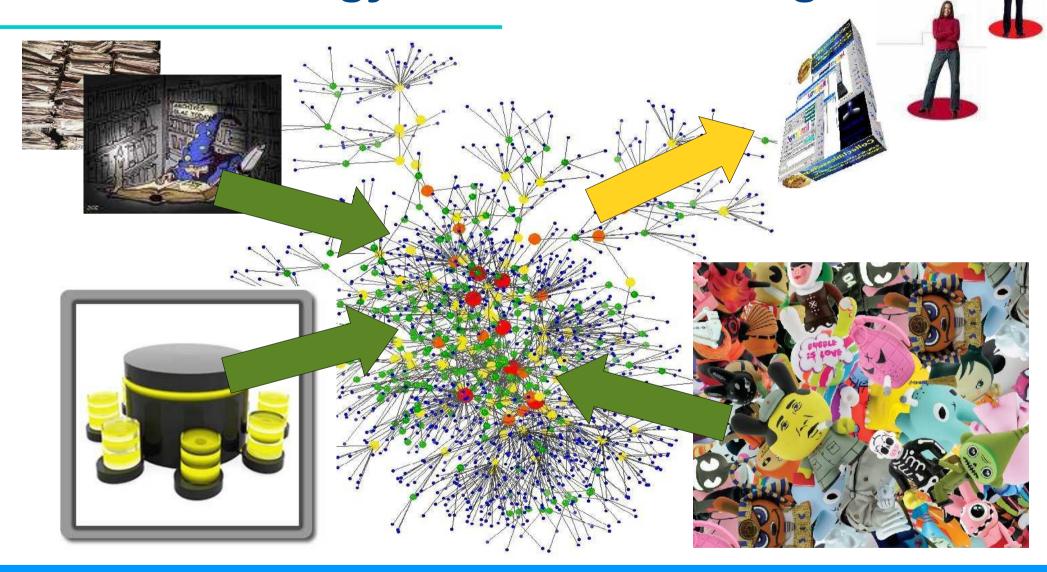
- IFD
 - International Framework for Dictionaries Library
- IFC
 - Industry Foundation Class
- IDM
 - Information Delivery Manual / Document
- BIM
 - Buidling Information Model



Contribution by SINTEF Byggforsk: Håvard Bell and Lars Bjørkhaug

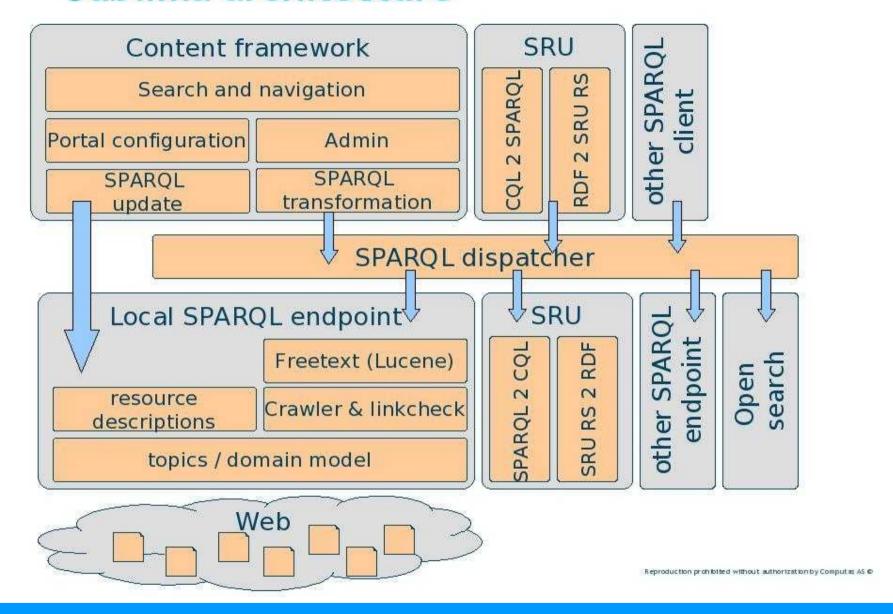


Pillar: Ontology & Semantic Lifting





Sublima architecture





Pillar Technology: Topic Maps

- Stack built on COMPASS
 - directed towards universal access, search & navigation
 - implemented in Java

generic framework (engine can be plugged in)

- Wandora wandora.org
- TinyTiM sourceforge
- TM++ sourceforge
- connectors written with TMAPI
- first version april '09





Pillar Best Practices

or "the process to introduce semantics"









Wrap up on SESAM4



Sesam4 is:

- focussed on Interoperability issues in digital environments
- aimed at Semantic Technologies
- an Open Project
- there until 2010

Sesam4 delivers:

- Best Practices & Guidelines for you to "semantisize your environment" (processes, data, integration)
- Technology for you to use
- Trends, experiences and ideas in reference implementations



Semantics? It's just the web evolving...

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Publication (Web 1.0)
Participation & Interaction (Web 2.0)
Identification & Interoperability (Web 3.0)

